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FORMULA INDEX.

THE following index of organic compounds of known empirical formula is arranged according to Richter's system (see *Lexikon der Kohlenstoff-Verbindungen*).

The elements are given in the order C, H, O, N, Cl, Br, I, F, S, P, and the remainder alphabetically.

The compounds are arranged—

Firstly, in groups according to the number of carbon atoms (thus C_1 group, C_2 group, etc.).

Secondly, according to the number of other elements besides carbon contained in the molecule (thus 5 IV indicates that the molecule contains five carbon atoms and four other elements).

Thirdly, according to the nature of the elements present in the molecule (given in the above order).

Fourthly, according to the number of atoms of each single element (except carbon) present in the molecule.

Salts are placed with the compounds from which they are derived. The chlorides, bromides, iodides, and cyanides of quaternary ammonium bases, however, are registered as group-substances.

C_1 Group.

CH_4 Methane, ignition of mixtures of air and (MASON and WHEELER), 45; (WHEELER), 840.

CCl_4 Carbon tetrachloride, action of aniline with (HARTUNG), 163.

1 II

CH_2O Formaldehyde, action of carbamide and (DIXON), 238.

CH_3I Methyl iodide, relative activities of ethyl iodide, propyl iodide and, with sodium α - and β -naphthoxides (COX), 666.

$COCl_2$ Carbonyl chloride, action of ammonia with (WERNER), 694.

1 III

$CHON$ Cyanic acid, metallic salts, hydrolysis of, 84.

CH_2ON_2 Carbamide, synthesis of (WERNER and CARPENTER), 694; mechanism of the synthesis of, from urethane (WERNER), 622; decomposition of, on heating with acids and with alkalis (WERNER), 84; interaction of formaldehyde and (DIXON), 238.

C_2 Group.

C_2H_5I Ethyl iodide, relative activities of methyl iodide, propyl iodide and, with sodium α - and β -naphthoxides (COX), 666.

C_2H_5O Ethyl alcohol, association of organic compounds in solution in (INNES), 410.

C_2H_5N Ethylamine, preparation of (WERNER), 899.

2 III

$C_2H_4O_2N_2$ Oxamide, formation of urea and of biuret from (WERNER and CARPENTER), 693.

C_2H_4ON Glycollamidine, salts of (RULE), 17.

$C_2H_4O_2N_2$ Methylolcarbamide, preparation of (DIXON), 246.

C_3 Group.

C_3H_7I *n*-Propyl iodide, relative activities of methyl iodide, ethyl iodide and with sodium α - and β -naphthoxides (COX), 666.

3 III

$C_3H_8O_2N$ Urethane, mechanism of the synthesis of urea from (WERNER), 622.

C₁ Group.

- C_4H_9Cl *n*-Butyl chloride, action of, with *o*- and *p*-toluidine (REILLY and HICKINBOTTOM), 874.
 $C_4H_{11}N$ Diethylamine, preparation of (WAGNER), 899; stannochloride of (DRUCE), 715.

4 III

- $C_4H_{10}O_2N_2$ Acetiminohydrin, preparation of (RULE), 11.

C₂ Group.

- $C_2H_6O_2N_2$ Dimethylolcarbamide, preparation of (DIXON), 247.
 $C_2H_5O_2N$ Methoxyacetiminoethyl ether (RULE), 9.

C₃ Group.

- C_6H_6 Benzene, association of organic compounds in solution in (INNES), 410.

6 II

- C_6H_6O Phenol, freezing points of mixtures of cresols and (DAWSON and MOUNTFORD), 923; estimation of, in mixtures with cresols (DAWSON and MOUNTFORD), 935.
 C_6H_5N Aniline, action of carbon tetrachloride with (HARTUNG), 163.
 $C_6H_8N_2$ *m*- and *p*-Phenylenediamine, stanni- and stanno-chlorides of (DRUCE), 718.
 $C_6H_8O_4$ Dimethyl tartrate, association of, in benzene (INNES), 433.
 $C_6H_7N_2$ Formaldehydepiperidylhydrazone (WEINHAGEN), 536.

6 III

- $C_8H_6O_4N_4$ 3:5-Dinitrobenzoxoadiazole oxide (GREEN and ROWE), 79.
 $C_8H_9O_2N_2$ Methoxyacetiminohydrin (RULE), 9.

C₄ Group.

- C_6H_5O Benzoic acid, calcium salt, hydrates and alcoholates of (STANBRIDGE), 805.
 C_6H_4O *o*-, *m*-, and *p*-Cresol, freezing points of mixtures of phenol and (DAWSON and MOUNTFORD), 923; estimation of, in mixtures with phenol (DAWSON and MOUNTFORD), 935.
 C_7H_9N Benzylamine, stanni- and stanno-chlorides of (DRUCE), 717.
 Methylaniline, stanni- and stanno-chlorides of (DRUCE), 716.
 o -Toluidine, stanni- and stanno-chlorides of (DRUCE), 716.
 o - and *p*-Toluidine, action of *n*-butyl chloride on (REILLY and HICKINBOTTOM), 874.
 $C_8H_{14}O_5$ β -Methylfructoside, preparation and structure of (STEMLE), 257.
 γ -Methylgalactoside (CUNNINGHAM), 598.

7 III

- $C_6H_3O_3N_3$ Trinitroguaiacol, and its pyridine salt (POLLECOFF and ROBINSON), 653.
 $C_6H_3O_3N_3$ Dinitroguaiacols (POLLECOFF and ROBINSON), 649.
 C_8H_9ON Formanilide, association of, in benzene (INNES), 432.
 C_8H_9OS Toluene-*o*- and -*p*-sulphonic acids, analysis of mixtures of (MCKIE), 799.
 $C_8H_9O_4N_3$ 3:5-Dinitro-2:6-diaminoanisole (POLLECOFF and ROBINSON), 655.
 $C_8H_9O_2N$ Phenylaminoacetic acid, sign of the product in conversion of phenylbromoacetic acid into (SEXTON and TUCKER), 140.

7 IV

$C_7H_7O_2NS$ Toluene-*o*- and -*p*-sulphonamides, freezing point curves of mixtures of (McKIE), 799.

C₈ Group.

$C_8H_6O_4$ Terephthalic acid, menthyl alkyl esters of (COHEN and DE PENNINGTON), 57.

$C_8H_8O_2$ Phenylacetic acid, association of, in benzene (INNES), 432.

$C_8H_8O_2$ Methyl salicylate, association of, in benzene (INNES), 431.

$C_8H_{11}N$ *p*-Methylbenzylamine, stannochloride of (DRUCE), 718.

8 III

$C_8H_8O_2N$ Nitroterephthalic acid, menthyl alkyl esters of (COHEN and DE PENNINGTON), 57.

$C_8H_8O_2N_4$ 4-Acetyl-2- and -3-*p*-phenylene-1-diazo-4-imides (MORGAN and CLEAGE), 591.

$C_8H_7O_2Br$ Phenylbromoacetic acid, sign of the product in conversion of into phenylaminacetic acid (SEETER and TUCKER), 140.

$C_8H_8O_3N$ 6-Nitro-2-methoxybenzoic acid (SIMONSEN), 782.

$C_8H_7O_3N_3$ 3:5:6-Trinitroveratrole (POLLECOFF and ROBINSON), 654.

$C_8H_8O_3N_2$ *p*-Nitromethylformanilide (MORGAN and GRIST), 690.

$C_8H_8O_3N_2$ 5:6-Dinitroguaiacol methyl ether (POLLECOFF and ROBINSON), 651.

C_8H_9ON Acetanilide, association of, in benzene (INNES), 433.

Acetophenoneoxime, association of, in benzene (INNES), 432.

C_8H_9ON Mandeliminehydrin (MACKENZIE), 1; (RULE), 12.

$C_8H_8O_2N_2$ Formylmethylaminobenzene-4-diazo-hydroxide (MORGAN and GRIST), 692.

$C_8H_7O_2Br$ 3-Bromoveratrole (SIMONSEN and RAU), 785.

$C_8H_8O_3N$ 6-Nitro-*o*-tolyl methyl ether (SIMONSEN), 781.

$C_8H_{10}ON_2$ *p*-Aminomethylformanilide (MORGAN and GRIST), 691.

$C_8H_{10}O_2N_2$ 5-Nitro-4-aminoveratrole (SIMONSEN and RAU), 27.

8 IV

$C_8H_8ON_2Cl_2$ 4-Acetyldichloro-*p*-phenylene-1-diazo-4-imides (MORGAN and CLEAGE), 594.

$C_8H_8O_2NCl$ *p*-Chloromandelamide, and its salts (RULE), 17.

$C_8H_{10}O_2NBr$ Bromoaminoveratroles (SIMONSEN and RAU), 786.

C₉ Group.

$C_9H_8O_2$ Cinnamic acid, association of, in benzene (INNES), 431.

$C_9H_{10}O_2$ Ethyl *p*-hydroxybenzoate, association of, in benzene (INNES), 434.
2-Methoxy-*m*-toluic acid, and its silver salt (SIMONSEN), 779.

9 III

$C_9H_8O_2Br$ α -Bromo- β -phenylpropionic acid, sign of the product in conversion of, into α -amino- β -phenylpropionic acid (SEETER, DREW, and MARTIN), 151.

$C_9H_8O_3N$ 5-Nitro-2- and -6-methoxy-*m*-tolualdehydes (SIMONSEN), 778.

$C_9H_8O_3N$ 5-Nitro-2- and -6-methoxy-*m*-toluic acids, and their salts (SIMONSEN), 779.

$C_9H_{10}O_2N_2$ 4-Nitroaceto-*o*-toluidide, trimorphism of (CHATTAWAY), 897.

$C_9H_{10}O_2N_2$ 6-Nitro-5-amino-3:4-dimethoxybenzoic acid (SIMONSEN and RAU), 28.

$C_9H_{10}O_2N_4$ 4:6-Dinitro-1:2:3-trimethoxybenzene (POLLECOFF and ROBINSON), 656.

$H_{11}O_2N$ α -Amino- β -phenylpropionic acid, sign of the product in conversion of α -bromo- β -phenylpropionic acid into (SEXTON, DREW, and MARTIN), 151.

2-Methoxy-*m*-tolualdoxime (SIMONSEN), 777.

$H_{11}O_2N_2$ Acetylmethylaminobenzene-4-diazohydroxide (MORGAN and GRIST), 692.

$H_{10}O_2N$ 5-Amino-3:4-dimethoxybenzoic acid, and its salts (SIMONSEN and RAU), 24.

$H_{11}ON_2$ *p*-Aminomethylacetanilide (MORGAN and GRIST), 691.

$H_{10}O_2N_2$ Nitrosotriacetoneamine, velocity of catalysis of (MCBAIN and BOLAM), 825.

9 IV

$H_{10}O_2NBr$ Bromoaminoveratric acids (SIMONSEN and RAU), 789.

C₁₀ Group.

H_{13} Hydrocarbon, from spinacene and sodium (CHAPMAN), 464.

10 II

H_2O_3 1-Hydrindone-2-carboxylic acid (ROBINSON and CRABTREE), 879.

H_2S_2 β -Naphthylthiosulphoxylic acid, and its sodium salt (WHITE), 608.

H_2N β -Naphthylamine, sulphonation of (GREEN and VAKIL), 35.

$H_{10}O_4$ Phenylsuccinic acids, optical activity of, and their esters (WREN), 210.

$H_{11}Cl$ α -Chloro-*ar*-tetrahydronaphthalene (GREEN and ROWE), 971.

$H_{12}O_4$ 5:6-Dimethoxy-*o*-toluic acid (PERKIN), 762.

$H_{12}N$ *ar*-Tetrahydro- α -naphthylamine, preparation and reactions of (GREEN and ROWE), 955.

$H_{12}N$ Aminobutylbenzene (REILLY and HICKINBOTTOM), 983.

10 III

$H_2O_4N_4$ Dinitronaphthiisooxadiazole (GREEN and ROWE), 72.

$H_2O_4N_2$ Nitronaphthiisooxadiazole (GREEN and ROWE), 72.

H_2ONa Sodium α -naphthoxide, relative activity of alkyl iodides with, methyl alcohol (COX), 821.

Sodium α - and β -naphthoxides, relative activities of alkyl iodides with (COX), 666.

$H_2O_2N_2$ 2:4-Dinitro-*ar*-tetrahydro- α -naphthol (GREEN and ROWE), 969.

H_2O_2N 2- and 4-Nitro-*ar*-tetrahydro- α -naphthol (GREEN and ROWE), 968.

H_2O_2N 2:4-Dinitro-*ar*-tetrahydro- α -naphthylamine, and its potassium salt (GREEN and ROWE), 962.

$H_2O_2N_2$ 4-Nitro-*ar*-tetrahydro- α -naphthylamine, and its salts (GREEN and ROWE), 960.

$H_2O_2N_4$ Semicarbazones of 5-nitro-2- and -6-methoxy-*m*-tolualdehydes (SIMONSEN), 778.

H_2O_2S *ar*-Tetrahydro- α -naphthol-4-sulphonic acid, and its sodium salt (GREEN and ROWE), 967.

H_2O_2N 5-Nitro-4-acetylaminoveratrole (SIMONSEN and RAU), 27.

$H_2O_2N_2$ 2-Methoxy-*m*-tolualdehyde semicarbazone (SIMONSEN), 777.

H_2ON Camphoroxime, association of, in benzene (INNES), 432.

10 IV

$H_2O_2N_2Cl$ 1-Chloro-2:4-dinitro-*ar*-tetrahydronaphthalene (GREEN and ROWE), 972.

$C_{10}H_7O_4NS$ 2-Nitro-*ar*-tetrahydro- α -naphthol-4-sulphonic acid (GARD and ROWE), 987.

$C_{10}H_9O_2NCl$ *p*-Chloromandeliminohydrin (RULE), 15.

$C_{10}H_{11}O_2NBr$ Bromoacetylaminoveratroles (SIMONSEN and RAU), 785, 790.

C_{11} Group.

$C_{11}H_{17}N$ *n*-Butyl-*o*- and *p*-toluidines, and their salts (REILLY and HICKINBOTTOM), 978.

$C_{11}H_{20}O_8$ Tetramethyl- γ -methylgalactoside (CUNNINGHAM), 599.
Tetramethyl- β -methylglucoside, preparation of (HAWORTH and LEITCH), 194.

11 III

$C_{11}H_{13}O_4N_2$ 6-Nitro-5-acetyl-amino-3:4-dimethoxybenzoic acid (SIMONSEN and RAU), 25.

$C_{11}H_{15}O_4Br$ 6-Bromo-3:4-dimethoxy-*S*-phenylpropionic acid (CRABTREE and ROBINSON), 871.

$C_{11}H_{17}O_4N$ Acetyl-amino-3:4-dimethoxybenzoic acids (SIMONSEN and RAU), 25.

$C_{11}H_{15}O_4N_2$ 2:3:5-Trinitro-*p*-tolyl-*n*-butylnitrosoamine (REILLY and HICKINBOTTOM), 993.

$C_{11}H_{15}O_4N_2$ 2:3:5-Trinitro-*p*-tolyl-*n*-butylnitrosoamine (REILLY and HICKINBOTTOM), 993.

$C_{11}H_{15}O_4N_2$ 3:5-Dinitro-*p*-tolyl-*n*-butylnitrosoamine (REILLY and HICKINBOTTOM), 991.

$C_{11}H_{15}O_4N_2$ 3:5-Dinitro-*p*-tolyl-*n*-butylnitrosoamine (REILLY and HICKINBOTTOM), 992.

$C_{11}H_{15}O_4N_2$ 2-Nitro-*p*-tolyl-*n*-butylnitrosoamine (REILLY and HICKINBOTTOM), 989.

$C_{11}H_{15}O_4N_2$ 3:5-Dinitro-*n*-butyl-*p*-toluidine (REILLY and HICKINBOTTOM), 990.

$C_{11}H_{15}ON_2$ 5-Nitroso-*n*-butyl-*o*-toluidine, and its salts (REILLY and HICKINBOTTOM), 982.

o- and *p*-Tolyl-*n*-butylnitrosoamine (REILLY and HICKINBOTTOM), 979.

$C_{11}H_{15}O_4N_2$ Nitro-*n*-butyl-*p*-toluidines, and their salts (REILLY and HICKINBOTTOM), 988.

11 IV

$C_{11}H_{15}O_4NBr$ Bromoacetylaminoveratric acids (SIMONSEN and RAU), 783.

C_{12} Group.

$C_{12}H_9N_2$ Azobenzene, association of, in benzene and alcohol (INNES), 430.

$C_{12}H_{22}O_{11}$ Lactose and Melibiose, constitution of (HAWORTH and LEITCH), 188.

12 III

$C_{12}H_9O_4N_4$ Dinitronaphthosooxadiazole oxide (GREEN and ROWE), 71.

$C_{12}H_9O_4N_2$ 2:4-Dinitro-*ar*-tetrahydroaceto- α -naphthalide (GREEN and ROWE), 961.

$C_{12}H_9O_4N_2$ 4-Nitro-*ar*-tetrahydroaceto- α -naphthalide (GREEN and ROWE), 959.

$C_{12}H_{14}ON$ Cotarnine, sodium salt (RAKSHIT), 469.

$C_{12}H_{14}ON_2$ 1-Acetyl-*ar*-tetrahydro-1:4-naphthylenediamine (GREEN and ROWE), 959.

p-Hydroxybenzaldehydepiperilylhydrazone (WEINHAGEN), 586.

Salicylaldehydepiperilylhydrazone (WEINHAGEN), 585.

C₁₃ Group.

- $\text{C}_{13}\text{H}_{10}\text{O}$ Benzophenone, association of, in benzene (INNES), 430.
 $\text{C}_{13}\text{H}_{12}\text{N}_2$ *p*-Aminoacetophenonepiperylhydrazone (+H₂O) (WEINHAGEN), 587.
 $\text{C}_{13}\text{H}_{22}\text{O}_{11}$ Methylbigalactoside (CUNNINGHAM), 602.

13 III

- $\text{C}_{13}\text{H}_{11}\text{ON}$ Formyldiphenylamine, association of, in benzene (INNES), 431.
 $\text{C}_{13}\text{H}_{11}\text{O}_4\text{N}$ 2:4-Dihydroxybenzylideneaniline (SENIER and GALLAGHER), 33.
 $\text{C}_{13}\text{H}_{19}\text{O}_2\text{N}_2$ Piperonalpiperylhydrazone (WEINHAGEN), 585.
 $\text{C}_{13}\text{H}_{19}\text{O}_2\text{N}_2$ 3:5-Dinitroaceto-*n*-butyl-*p*-toluidide (REILLY and HICKINBOTTOM), 990.
 $\text{C}_{13}\text{H}_{19}\text{ON}_2$ Anisaldehydepiperylhydrazone (WEINHAGEN), 588.
 $\text{C}_{13}\text{H}_{19}\text{O}_2\text{N}_2$ Nitroaceto-*n*-butyl-*p*-toluidides (REILLY and HICKINBOTTOM), 989.
 $\text{C}_{13}\text{H}_{19}\text{ON}$ Aceto-*n*-butyl-*o*- and -*p*-toluidides (REILLY and HICKINBOTTOM), 979.

13 IV

- $\text{C}_{13}\text{H}_{19}\text{O}_2\text{NBr}$ 2:4-Dihydroxybenzylidenebromoanilines (SENIER and GALLAGHER), 34.

C₁₄ Group.

- $\text{C}_{14}\text{H}_{10}$ Phenanthrene, association of, in benzene and alcohol (INNES), 431.

14 II

- $\text{C}_{14}\text{H}_8\text{O}_2$ 3:4-Phenanthraquinone (BARGER), 220.
 $\text{C}_{14}\text{H}_{10}\text{O}_2$ Benzil, association of, in benzene and alcohol (INNES), 430.
 $\text{C}_{14}\text{H}_{10}\text{O}_2$ 3:4-Dihydroxyphenanthrene (*morphol*), synthesis of (BARGER), 218.
 $\text{C}_{14}\text{H}_{20}\text{N}$ Di-*n*-butylaniline, and its salts (REILLY and HICKINBOTTOM), 99.
 $\text{C}_{14}\text{H}_{18}\text{N}_2$ *p*-Phenylenedi-*n*-butyldiamine, and its hydrochloride (REILLY and HICKINBOTTOM), 107.

14 III

- $\text{C}_{14}\text{H}_{11}\text{O}_2\text{N}$ γ -Benzilmonoxime, association of, in benzene (INNES), 432.
 $\text{C}_{14}\text{H}_{13}\text{O}_2\text{N}$ 2:4-Dihydroxybenzylidene-*m*-toluidine (SENIER and GALLAGHER), 34.
 $\text{C}_{14}\text{H}_{19}\text{ON}_2$ *p*-Nitrosodi-*n*-butylaniline, and its salts (REILLY and HICKINBOTTOM), 103.

C₁₅ Group.

- $\text{C}_{15}\text{H}_{16}\text{O}$ Morindone, constitution and reactions of (SIMONSEN), 766.
 $\text{C}_{15}\text{H}_{16}\text{O}$ Santol (O'NEILL and PERKIN), 137.
 $\text{C}_{15}\text{H}_{18}\text{N}$ Di-*n*-butyl-*p*-toluidine, and its salts (REILLY and HICKINBOTTOM), 980.

15 III

- $\text{C}_{15}\text{H}_{19}\text{O}_2\text{N}_2$ 3:5-Dinitro-2-methoxyphenyl carbonate (POLLECOFF and ROBINSON), 649.
 $\text{C}_{15}\text{H}_{19}\text{O}_2\text{N}_2$ 5-Nitro-2-methoxyphenyl carbonate (POLLECOFF and ROBINSON), 648.
 $\text{C}_{15}\text{H}_{15}\text{NCl}$ Cinnamylidenechloroanilines (SENIER and GALLAGHER), 30.
 $\text{C}_{15}\text{H}_{15}\text{NBr}$ Cinnamylidenebromoanilines (SENIER and GALLAGHER), 30.
 $\text{C}_{15}\text{H}_{19}\text{O}_2\text{N}_2$ 2-Nitrodi-*n*-butyl-*p*-toluidine, and its hydrochloride (REILLY and HICKINBOTTOM), 994.

15 IV

- $\text{C}_{15}\text{H}_{15}\text{O}_2\text{NBr}$ Benzoyl derivatives of bromoaminoveratroles (SIMONSEN and RAU), 786.

C₁₆ Group.

- C₁₆H₁₀O₂** 7-Hydroxy-4:8-indeno-1:2-benzoquinone (ROBINSON and CHATREE), 879.
C₁₆H₁₂O₅ *γ*-Diphenylsuccinic anhydride, action of alcohols and amines (WREN and WILLIAMS), 832.
 7-Methoxyphenylbenzopyrones (ROBINSON and TURNER), 375.
C₁₆H₁₂O₅ *iso*Brazilein, synthesis of salts of (CRABTREE and ROBINSON), 859.
 Morindone methyl ether (SIMONSEN), 773.
C₁₆H₁₁O₆ Santal (O'NEILL and PERKIN), 136.
C₁₆H₁₁O₄ Diphenylsuccinic acids, optical activity of, and their esters (WREN), 210.
C₁₆H₁₂O 2-Hydroxy-4-methoxyphenyl phenylethyl ketone (CRABTREE and ROBINSON), 870.
C₁₆H₃₂O₂ Palmitic acid, cerous salt (MORRELL), 116.
C₁₆H₃₂O Hexadecyl alcohol, association of, in benzene and alcohol (ISNEN), 431.

16 III

- C₁₆H₁₃O₂Cl** 7-Methoxy-2-phenyl-1:4-benzopyranol anhydrohydrochloride (+ 3H₂O), (ROBINSON and TURNER), 877.
C₁₆H₁₁O₂N₂ Cinnamylidenenitrotoluidines (SENIER and GALLAGHER),
C₁₆H₁₁ON Cinnamylidene-*p*-anisidine (SENIER and GALLAGHER), 31.
C₁₆H₁₀O₂N₂ 2:4-Dinitro-*ac*. and -*ar*-tetrahydro-*α*-naphthylamines (GEMZ and ROWE), 972.
C₁₆H₁₃O₂N₂ Phenylacetiminohydrin (RULE), 11.
C₁₆H₁₃O₂N₂ Mandeliminohydrin, preparation of (RULE), 12.

16 IV

- C₁₆H₁₃O₂N₂S** 4-*p*-Sulphobenzeneazo-*π*-butylaniline, sodium salt (REILLY and HICKINBOTTOM), 111.

C₁₇ Group.

- C₁₇H₁₄O₂** 3-Acetyl-2-phenyl-1:4-benzopyranol or 3-Benzoyl-2-methyl-1:4-benzopyranol (+ H₂O), and its anhydrohydrochloride (CHATTERJI and GHOSH), 446.
 7-Hydroxy-3-benzyl-2-methyl-1:4-benzopyrene (CRABTREE and ROBINSON), 867.
 Salicylidenebenzoylacetone (+ $\frac{1}{2}$ H₂O), and its anhydrohydrochloride (CHATTERJI and GHOSH), 447.
C₁₇H₁₃O₃ Substance, from acetylacetone and salicylaldehyde (CHATTERJI and GHOSH), 448.
C₁₇H₁₆O₄ 2:4-Dimethoxydibenzoylmethane (ROBINSON and TURNER), 376.
 Methyl hydrogen *γ*-diphenylsuccinate, and its sodium salt (WREN and WILLIAMS), 837.
C₁₇H₁₇N Cinnamylidene-*p*-xylylidine (SENIER and GALLAGHER), 32.

17 III

- C₁₇H₁₃O₂N** 2:4-Dihydroxybenzylidene-*β*-naphthylamine (SENIER and GALLAGHER), 32.
C₁₇H₁₇ON Cinnamylidene-*p*-phenetidine (SENIER and GALLAGHER), 32.
C₁₇H₁₉O₂N Morphine, calcium salt (RAKSHIT), 470.
C₁₇H₂₀O₂N₂ Osazone of sugar from morindiu (SIMONSEN), 774.
C₁₇H₂₂O₂N 2:4-Dihydroxybenzylidenecamphylamine (SENIER and GALLAGHER), 35.

17 IV

- C₁₇H₁₇O₂N₂S** 4-Methyl-*N*-*π*-butyldiazoaminobenzene-4'-sulphonic acid, and its salts (REILLY and HICKINBOTTOM), 984.

C₁₈ Group.

- H₂O**, 7-Hydroxy-3-benzyl-2-methyl-1:4-benzopyrone methyl ether (CRABTREE and ROBINSON), 867.
H₁₀O, Morindone trimethyl ether (SIMONSEN), 772.
H₁₀O, Ethyl hydrogen *r*- and *meso*-diphenylsuccinates, and their metallic salts (WREN and WILLIAMS), 835.
H₂O, 2-Hydroxy-4-methoxyphenyl 3:4-dimethoxyphenylethyl ketone (CRABTREE and ROBINSON), 871.
H₁₁O₄, Menthyl hydrogen terephthalate (COHEN and DE PENNINGTON), 64.
H₂O, Linolenic acid, cerous salt (MORRELL), 119.
H₂O, α - and β -Elaeostearic acids, cerous and lead salts (MORRELL), 117.
H₂O, Linoleic acid, cerous salt (MORRELL), 117.
H₂O, Elaidic acid, cerous salt (MORRELL), 117.
H₂O, Oleic acid, and its potassium salt, molecular condition of, in alcoholic solution (LAING), 435; cerous salt (MORRELL), 117.
H₃₆O, Stearic acid, cerous salt (MORRELL), 112.

18 III

- H₁₀N₂**, Formylmethylaminobenzene-4-azo- β -naphthol (MORGAN and GRIST), 692.
H₁₃O₂N₂, Cinnamylidenenitro- ψ -cumidine (SENIER and GALLAGHER), 32.
H₁₁O₂N, α -Imino- $\beta\beta$ -diphenyldipropionic acid (SENIER, DREW, and MARTIN), 161.
H₂ON, Benzo-*n*-butyl-*p*-toluidide (REILLY and HICKINBOTTOM), 979.
H₁₁O₂N, Codeine, potassium and sodium salts of (RAKSHIT), 466.
H₁₃O₂N, Menthyl hydrogen nitroterephthalate (COHEN and DE PENNINGTON), 64.

C₁₀ Group.

- H₁₆O**, 7-Acetoxy-3-benzyl-2-methyl-1:4-benzopyrone (CRABTREE and ROBINSON), 867.
H₁₆O, Methyl menthyl terephthalate (COHEN and DE PENNINGTON), 63.
H₃₆O₁₁, Hexamethyl methyl lactoside (HAWORTH and LEITCH), 195.

19 III

- H₂O₂N**, *o*-Nitromethyl menthyl terephthalate (COHEN and DE PENNINGTON), 66.

C₂₀ Group.

- H₂O**, 3':4'-Methylenedioxy-2-phenyl-2:3-dihydro-1:4-*a*-naphthapyrone (CRABTREE and ROBINSON), 865.
H₂O, Diacetylmorindone methyl ether (SIMONSEN), 774.
H₂O, Berberidene (PERKIN), 761.
H₂O, Ketodihydroberberidene (PERKIN), 763.
H₂O, Ethyl menthyl terephthalate (COHEN and DE PENNINGTON), 63.
H₂O, Abietic acid, cerous salt (MORRELL), 120.
H₂O₁₁, Heptamethyl methyl lactoside (HAWORTH and LEITCH), 195.
H₂O₁₁, Octamethyl digalactose (CUNNINGHAM), 601.

20 III

- H₁₀O₂N**, *N*-Phenoxyacetylcarbazole (COPISAROW), 818.
H₂O₂N, Acetylmethylaminobenzene-4-azo- β -naphthol (MORGAN and GRIST), 694.
H₁₀O₂N, Oxyberberine, preparation of (PERKIN), 737.
 α - and β -Oxyberberines (PERKIN), 518.

$C_{20}H_{19}O_2N$ Dihydroanhydro-*α*- and -*epi*-berberines, and their salts (PERKIN, 506, 737.

$C_{20}H_{19}O_2N$ *epi*-Berberine, and its salts (PERKIN), 492.

$C_{20}H_{21}O_2N$ Tetrahydroanhydro*epi*berberine, and its salts (PERKIN), 510.

$C_{20}H_{27}O_2N$ Nitroethyl menthyl terephthalates (COHEN and DE P. NINGTON), 66.

20 IV

$C_{20}H_{21}O_2NS$ 4-*p*-Sulphobenzeneazodi-*n*-butylaniline, sodium and potassium salts (REILLY and HICKINBOTTOM), 109.

C₂₁ Group.

$C_{21}H_{19}O_2$ Acetylmorindone (SIMONSEN), 770.

21 III

$C_{21}H_{21}O_2N_2$ Hydroxymethoxyphenanthraphenazines (POLLECOFF and ROBINSON), 651.

$C_{21}H_{23}O_2N_2$ 5:5'-Dinitro-2:2' and -4:4'-dimethoxydi-3-*m*-methylstyryl ketones (SIMONSEN), 778.

$C_{21}H_{21}O_2N$ Anhydromethylberberines, and their salts (PERKIN), 746, 754.

$C_{21}H_{23}O_2N$ *O*-Methyle*pi*berberine (PERKIN), 520.

$C_{21}H_{21}O_2N$ Trioxyanhydromethylberberine (PERKIN), 747.

$C_{21}H_{23}O_2N$ Hydroxy*iso*anhydrodihydromethylberberines (PERKIN), 747.

$C_{21}H_{23}O_2N_2$ Semicarbazone of ketodihydroberberidene (PERKIN), 753.

$C_{21}H_{21}ON$ *N*-*n*-Nonoylecarbazole (COPISAROW), 818.

$C_{21}H_{23}O_2N$ Dihydromethylisotetrahydroanhydroberberine, and its salts (PERKIN), 759.

21 IV

$C_{21}H_{23}O_2NCl$ ψ -Methylberberinium chloride (+H₂O) (PERKIN), 750.

$C_{21}H_{23}O_2NI$ ψ -Berberinium iodide (PERKIN), 751.

$C_{21}H_{23}O_2NI$ *N*-Methylisotetrahydroanhydroberberine hydriodide (PERKIN), 748.

C₂₂ Group.

$C_{22}H_{19}O_2$ 7-Methoxy-2:4-diphenyl-1:4-benzopyranol, and its salts (ROBINSON and TURNER), 877.

22 III

$C_{22}H_{19}O_2N$ *r*-Diphenylsuccinanic acid (WREN and WILLIAMS), 837.

$C_{22}H_{21}O_2N$ *O*-Ethyle*pi*berberine (PERKIN), 521.

$C_{22}H_{23}O_2N$ Narcotine, potassium and sodium salts (RAKSHIT), 467.

$C_{22}H_{27}O_2N$ Dihydrodimethylisotetrahydroanhydroberberine, and its salts (PERKIN), 760.

$C_{22}H_{23}O_2N$ Nitrobutyl menthyl terephthalates (COHEN and DE P. NINGTON), 66.

C₂₃ Group.

$C_{23}H_{19}O_2N$ Diphenylsuccino-*p*-tolil (WREN and WILLIAMS), 839.

$C_{23}H_{21}O_2N$ *meso*- and *r*-Diphenylsuccino-*p*-toluidic acid, and the silver salt of the latter (WREN and WILLIAMS), 838.

$C_{23}H_{23}O_2N$ Phenylhydrazone of substance $C_{17}H_{15}O_2$ (CHATTERJEE and GHOSH), 449.

$C_{23}H_{23}O_2N$ Anhydro*epi*berberineacetone (PERKIN), 521.

$C_{23}H_{25}O_2N$ Acetoxy*iso*anhydrodihydromethylberberines (PERKIN), 754.

C₂₄ Group.

$C_{24}H_{25}N_2$ Dicinnamylidene-*p*-phenylenediamine (SENIER and CALAGHER), 32.

- $^{11}\text{H}_{11}\text{O}_2$ Substance, from acetylacetone and salicylaldehyde (CHATTERJI and GHOSH), 449.
 $^{11}\text{H}_{11}\text{O}_7$ Deoxy-*n*- and -*iso*-santalin (O'NEILL and PERKIN), 130, 133.
 $^{11}\text{H}_{11}\text{O}_8$ *n*- and -*iso*-Santalin (O'NEILL and PERKIN), 127, 131.
 $^{11}\text{H}_{11}\text{O}_4$ *cyclo*Hexyl menthyl terephthalate (COHEN and DE PENNINGTON), 63.

24 III

- $^{11}\text{H}_{12}\text{O}_2\text{N}$ Methyl *r*-diphenylsuccino-*p*-toluidate (WREN and WILLIAMS), 839.
 $^{11}\text{H}_{12}\text{ON}_3$ 4-Di-*n*-butylaminobenzeneazo- β -naphthol (REILLY and HICKIN-BOTTOM), 108.

C₂₅ Group.

- $^{12}\text{H}_{12}\text{O}_7$ Santalone (O'NEILL and PERKIN), 133.
 $^{12}\text{H}_{12}\text{O}_{11}$ Methyltetragalactoside and Methyltetraglucoside (CUNNINGHAM), 606.

25 III

- $^{12}\text{H}_{12}\text{ON}_2$ *N*-Carbonylcarbazole (COPISAROW), 819.

C₂₆ Group.

- $^{12}\text{H}_{12}\text{N}_2$ Dicinnamylidene- α -naphthylenediamine (SENIER and GALLAGHER), 33.
 $^{12}\text{H}_{12}\text{O}_4$ Octyl menthyl terephthalate (COHEN and DE PENNINGTON), 63.

26 III

- $^{12}\text{H}_{12}\text{O}_2\text{N}_2$ *N*-Oxalylcarbazole (COPISAROW), 819.

C₂₇ Group.

- $^{12}\text{H}_{20}\text{O}_3$ Substance ($+\frac{1}{2}\text{H}_2\text{O}$), from benzoylacetone and salicylaldehyde (CHATTERJI and GHOSH), 446.

C₂₈ Group.

- $^{12}\text{H}_{19}\text{O}_4$ α -Naphtholphthalein, preparation of (WERNER), 20.
 $^{12}\text{H}_{19}\text{O}_4$ Piperonylidene derivative of 3':4'-methylenedioxy-2-phenyl-2,3-dihydro-1:4- α -naphthopyrone (CRABTREE and ROBINSON), 865.
 $^{12}\text{H}_{21}\text{N}$ Tetraphenylpyrrole, synthesis of (G. M. and R. ROBINSON), 669.
 $^{12}\text{H}_{14}\text{O}_4$ Menthyl terephthalate (COHEN and DE PENNINGTON), 64.

28 III

- $^{12}\text{H}_{30}\text{ON}$ *N*-Palmitylcarbazole (COPISAROW), 819.
 $^{12}\text{H}_{11}\text{O}_2\text{N}$ Menthyl nitroterephthalate (COHEN and DE PENNINGTON), 64.

C₂₉ Group.

- $^{12}\text{H}_{18}$ Spinacene, analysis and reactions of, and its hexahydro-bromide and -chloride (CHAPMAN), 458.

29 III

- $^{12}\text{H}_{10}\text{O}_2\text{N}_2$ *iso*-Emetine ($+\text{H}_2\text{O}$), and its salts (PYMAN), 226.

C₃₀ Group.

- $^{12}\text{H}_{24}\text{N}_2$ Dicinnamylidenebenzidine (SENIER and GALLAGHER), 33.

30 III

- $^{12}\text{H}_{10}\text{O}_2\text{N}_2$ *N*-Methylisometine (PYMAN), 228.

C₃₂ Group.

- $^{12}\text{H}_{30}\text{O}_{11}$ Acetyl-*n*- and -*iso*-santalin (O'NEILL and PERKIN), 128.
 $^{12}\text{H}_{31}\text{O}_{11}$ Acetyldeoxy-*n*- and -*iso*-santalin (O'NEILL and PERKIN), 130, 134.

32 III

$C_{27}H_{40}O_4N_2$ *N*-Methylisosematinemethine, and its salts (PYMAN), 229.

32 IV

$C_{33}H_{40}O_4N_2Cl_4$ *N*-Methylemetine methochlorides (PYMAN), 233.

$C_{33}H_{40}O_4N_2I_4$ *N*-Methyl-*n*- and -*iso*-emetine methiodides (PYMAN), 233.

 C_{35} Group.

$C_{35}H_{39}O_4N_2$ Ergotinine, supposed formation of ergotoxine ethyl ester from (BARGER and EWINS), 235.

$C_{35}H_{39}O_4N_2$ Ergotoxine, formation of the phosphate of, from ergotinin (BARGER and EWINS), 235.

 C_{36} Group.

$C_{36}H_{31}O_8$ Benzoylmorindone (SIMONSEN), 771.

 C_{37} Group.

$C_{37}H_{40}O_{11}$ Methyltrimaltoside (+ H_2O) (CUNNINGHAM), 607

ERRATA.

VOL. CXI. (TRANS., 1917).

Page	Line	
243	15*	for "water" read "oxygen."
774	15*	,, "sodium hypochlorite" read "potassium permanganate."

VOL. CXIII. (TRANS., 1918).

31	19	,, " $C_{16}H_{15}O_3N_2$ " read " $C_{16}H_{14}O_3N_2$."
100	3*	,, "4-di- <i>n</i> -butylaminoazobenzene-4'-sulphonic acid" read "4-sulphobenzeneazodi- <i>n</i> -butylaniline."
100	1	,, "4- <i>n</i> -butylaminoazobenzene-4'-sulphonic acid" read "4- <i>p</i> -sulphobenzeneazo- <i>n</i> -butylaniline."
122	16*	,, " $C_{63}(C_{18}H_{31}O_4)_3$ " read " $Ce(C_{18}H_{31}O_4)_3$."
123	4	,, "(Average temperature)" read "(Room temperature)."
540	4	,, "+ 50.6°" read "— 50.6°."
774	6	,, " $C_{29}H_{16}O_7$ " read " $C_{29}H_{14}O_7$."

* From bottom.

